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James Farrell

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EXAMINER

WEIS, SAMUEL

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/713,126	Applicant(s) FARRELL ET AL.	
	Examiner SETH WEIS	Art Unit 3695	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of the Claims

1. This action is in reply to Applicant's response filed 13 January 2010.
2. Claims 18-28 are pending and have been examined.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 18-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 18 recites "a computer system including a memory that mitigates the effects of rises or falls in market prices caused by the execution of a conditional order." However the body of the claim does not provide the structure of the system. A "order book manager," "order processor", "spike control processor," and "open market processor" are not sufficient to describe the system. Instead, claim 18 appears to be drawn towards software, per se which is not statutory. Claims 19-24 are rejected under similar reasoning.

Claims 25-26 and 28 recite in the preamble "computer readable medium having stored therein data representing instructions executable by a programmed processor for mitigating the effect of a market spike caused by the triggering and the election of a conditional order, the storage medium comprising instructions operative for." Claim 23 is considered non-statutory because the steps are considered to be software, per se.

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Claim 26 is dependent from claim 25 and stand rejected under the same reasoning.

Examiner suggests Applicant amend claim 25 with the following: "A computer readable medium storing instructions which when executed by a programmed processor, cause the programmed processor to perform the following: ."

Claims 26-27 recite in the preamble "a signal-bearing medium having stored therein data representing instructions executable by a programmed processor for mitigating the effect of a market spike caused by the triggering and the election of a conditional order, the signal-bearing medium comprising." These claims are non-statutory because they can be clearly interpreted as a signal per se. ¶0069 of the instant specification discloses "The machine-readable medium may selectively be, but not limited to, an electronic, magnetic, optical, electromagnetic, infrared, or semiconductor system, apparatus, device, or propagation medium. A non-exhaustive list of examples of a machine-readable medium would include: an electrical connection having one or more wires, a portable magnetic or optical disk, a volatile memory such as a Random Access Memory "RAM," a Dynamic Random Access Memory (DRAM), a Read-Only Memory "ROM," an Erasable Programmable Read-Only Memory (EPROM or Flash memory), an electrical Erasable Programmable Read-Only Memory (EEPROM), and an optical fiber (optical). A machine-readable medium may also include a tangible medium upon which code or software is printed, as the code or software may be translated into a high-level language that may be compiled through a scanner, and/or interpreted or otherwise processed. The processed medium may then be stored in a

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computer and/or machine memory.” Examiner suggests Applicant amend the claims to a different statutory class, such as a *Bilski* method claim.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 18-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 recites "a computer system including a memory that mitigates the effects of rises or falls in market prices caused by the execution of a conditional order." However the body of the claim does not provide the structure of the system. Because "order book manager," "order processor", "spike control processor," and "open market processor" can be clearly interpreted as software; these claim limitations are not sufficient to describe the system. Therefore, the claims fail to distinctly claim the subject matter which applicant regards as the invention. Claims 19-24 are rejected under similar reasoning.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claims 18-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cutler, U.S. Pat. App. Pub. No. 2005/0075965 (hereinafter, Cutler).

As to claim 18, Cutler discloses a computer system including a memory that mitigates the effects of rises or falls in market prices caused by the execution of an order comprising:

an order book manager stored in the memory that receives orders (§0022, 0026);

an order processor that compares an execution price of a order to a predefined price threshold (§0081, 0138-139);

a spike control processor that delays the matching of orders received by the order book when an execution price of the conditional order lies outside of the predefined price threshold, the spike control processor compares an indicative opening price to the predetermined price threshold, wherein the indicative opening price is adjusted by orders requested while the market is not open (§0141-143); and

an open market processor that opens the market when the indicative opening price lies within the predetermined price threshold, wherein the market is reserved when the indicative opening price lies outside of the predetermined price threshold (§0141-143).

Cutler does not explicitly disclose conditional orders; however, conditional orders are old and well known in the financial arts. A person of ordinary skill in the art would utilize the matching system of Cutler for the matching and transacting of conditional orders.

As to claim 19, Cutler discloses wherein the execution price of the order comprises a price range within which the order is satisfied and a trade is executed (¶0138-139).

As to claim 20, Cutler discloses wherein the open market processor is configured to open the market to trading when the indicative opening price lies within the predetermined price threshold or when a timed period lapses or when a manual intervention occurs (¶0138-139).

As to claim 21, Cutler discloses wherein the predefined price threshold comprises a no-bust range (¶0138-139).

As to claim 22, Cutler discloses a memory configured to retain a time parameter used to determine a maximum period of time that a matching of orders may be reserved (¶0141-143).

As to claim 23, Cutler discloses a matching system coupled to the order book manager (¶022, 0026).

As to claim 24, Cutler discloses wherein the order processor is configured to compare an execution price of a order to a predefined price threshold in real time (¶0068).

As to claim 25, Cutler discloses computer readable medium having stored therein data representing instructions executable by a programmed processor for mitigating the effect of a market spike caused by the triggering and the election of a order, the storage medium comprising instructions operative for:

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monitoring orders submitted to a trading engine in an automated matching system; comparing the price of a conditional order to a predefined price range (§0022, 0026); delaying the matching of orders submitted to the trading engine when an execution price of a stop order lies outside of the predefined price range (§0141-143); deriving an opening price to be used by the trading engine (§0138-139); and delaying a matching of the orders until the opening price lies within a second predefined price range or a time period lapses (§0138-139).

Cutler does not explicitly disclose conditional orders; however, conditional orders are old and well known in the financial arts. A person of ordinary skill in the art would utilize the matching system of Cutler for the matching and transacting of conditional orders.

As to claim 26, Cutler discloses wherein the measuring code delay the matching of orders until the opening price lies within the second predefined price range or the time period lapses, or a manual intervention occurs (§0138-139).

As to claim 27, Cutler discloses signal-bearing medium having stored therein data representing instructions executable by a programmed processor for mitigating the effect of a market spike caused by the triggering and the election of a order, the signal-bearing medium comprising:

an evaluation logic stored on the signal-bearing medium and executable by the programmed processor for monitoring orders submitted to a trading engine in an automated matching system (§022, 026), the evaluation logic being configured to compare an execution price of a order to a predefined price range (§0138-139);

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a delay logic stored on the signal-bearing medium and executable by the programmed processor for delaying the matching of the orders submitted to the trading engine when the price of a transaction lies outside of the predefined price range by establishing a reserved state for the submitted orders (§§0141-143); a pricing logic stored on the signal-bearing medium and executable by the programmed processor for deriving an opening price to be used by the trading engine (§§0141-143); and a timing logic stored on the signal-bearing medium and executable by the programmed processor for measuring a time interval used to delay a matching of the orders until the opening price is within a predefined price range up to a maximum delay time set by a control center, wherein the reserved state is removed and the market is opened when the opening price is within a predefined price range (§§0138-141).

Cutler does not explicitly disclose conditional orders; however, conditional orders are old and well known in the financial arts. A person of ordinary skill in the art would utilize the matching system of Cutler for the matching and transacting of conditional orders.

As to claim 28, Cutler discloses computer readable medium having stored therein data representing instructions executable by a programmed processor for mitigating the effect of a market spike caused by the triggering and the election of a stop order, the storage medium comprising instructions operative for: monitoring orders submitted to a trading engine in an automated matching system (§§022, 026); comparing the price of a order to a predefined price range (§§0138-139); delaying the matching of orders submitted to the trading engine when an execution price of a stop order lies outside of

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the predefined price range (§0141-143); deriving an opening price to be used by the trading engine (§0138-139); and delaying a matching of the orders until the opening price lies within a predefined price range up to a maximum delay time set by a control center (§0138-139).

Cutler does not explicitly disclose stop orders; however, stop orders are old and well known in the financial arts. A person of ordinary skill in the art would utilize the matching system of Cutler for the matching and transacting of conditional orders.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SETH WEIS whose telephone number is (571)272-1882. The examiner can normally be reached on 8:30 to 5, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Kyle can be reached on (571) 272-6746. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SETH WEIS/
Examiner, Art Unit 3695

/Charles R. Kyle/
Supervisory Patent Examiner, Art Unit 3695